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(54) Title: TRANSPORTATION OF GOODS

(57) Abstract:

TRANSPORTATION OF GOODS

THIS INVENTION relates to the transportation of goods. In particular it relates to a system for, and a method of, estimating the cost involved in transporting goods. It also extends to a carrier medium carrying computer readable code for controlling a computer to carry out the method.

According to the invention, there is provided a data processing system for estimating the cost involved in transporting goods between a selected source location and a selected destination location, the system including

a communication module for communicating with a user to obtain at least the selected source location, the selected destination location, and a selected type of goods;

a database including

a route database in which a plurality of source and destination locations are provided, the selected source and destination locations being one of the plurality of source and destination locations; and

a goods database in which a plurality of different types of goods are listed; and

an estimator operable to interrogate the goods database and the route database and estimate the cost involved in transporting the selected type of goods between the selected source location and the selected destination location and communicate the estimation to the user.

The system may define a central server and include a plurality of remote user devices which communicate with the central server via the communication module of the central server via a communications network. The communications network is preferably the Internet. It is however, to be appreciated that the communications network can be any network configured for digital communication.

In certain embodiments of the invention, the system is a stand-alone unit in the form of a personal computer e.g. a laptop computer programmed to carry out the method.

The input data is typically selected from the group consisting of purchase terms data, mode of transport data, currency data, cost of goods data, data on the weight of the goods, and data on the dimensions of the goods. It is however to be appreciated that a variety of further databases may be included and accessed to enhance the accuracy of the estimate.

The goods database may include at least cost data on a plurality of goods previously transported between the source and destination locations, the system being configured to interrogate the goods database based on the selected goods and retrieve cost data on at least associated goods thereby to estimate the cost involved in transporting the selected goods between the selected source and destination locations.

The goods database typically includes a list or inventory of goods which are typically transported regularly between global source and destination locations by various transportation methods. Accordingly, the system may include a mode of transport database providing cost information for transporting various types of goods by at least one mode of transport selected from the group consisting of land transport, rail transport, sea transport and air transport.

The mode of transport database may include at least one further database selected from the group consisting of

an ocean freight cost database including cost data for estimating the ocean freight costs associated with transporting the selected goods,

an airfreight cost database including cost data for estimating the airfreight associated with transporting the selected goods,

a railway cost database including cost data for estimating the railway cost associated with transporting the selected goods,

a road cost database including cost data for estimating the road cost associated with transporting the selected goods, and

an insurance cost database including cost data for estimating the cost of insuring the selected goods.

The goods database may include information on the transportation cost of the goods at predefined locations or in certain countries.

Preferably, the system includes at least one database selected from the group consisting of

a packaging cost database including cost data for estimating the cost of packaging the selected goods,

a documentation cost database including cost data for estimating the cost of documentation associated with transporting the selected goods,

a handling depot cost database including cost data for estimating the cost associated with handling the selected goods,

a freight cost database including cost data for estimating the freight cost of the selected goods,

a customs cost database including cost data for estimating the customs costs associated with importing/exporting the selected goods,

a harbour/airport cost database including cost data for estimating harbour/airport costs associated with transporting the selected goods,

a finance cost database including cost data for estimating the cost of financing the selected goods, the finance cost database including confirming house costs and bank costs,

an agent/forwarder cost database including cost data for estimating the cost associated with the agent/forwarder of the selected goods, and

a legal database which includes legal data relevant to each particular type of goods, the legal database including data selected from the group consisting of taxes payable, laws and regulations relating to each type of goods, authorities providing approval for import or export of each type of goods and permits required.

It is however to be appreciated that further databases may be included in the system thereby to enhance the accuracy of the estimation. The legal database may include legal data relevant to each particular type of goods. The legal database typically includes data on taxes payable, laws and regulations relating to each type of goods, authorities providing approval, if any, for import or export of each type of goods, permits required and the cost thereof, or the like.

To facilitate use of the system, the purchase terms data may be defined in the form of conventional INCOTERMS.

INCOTERMS are a set of rules agreed to internationally. For example:

FOB - Free On Board, i.e. the price of the goods quoted by the supplier includes all costs involved in getting the goods on board ship, and may include packaging, road transportation to the harbour, storage, loading on ship, etc.

Ex Works - the price quoted by the supplier does not include anything other than the price at the source location and the system optionally recognises that it has to add packaging, transportation to the harbour, storage, loading, insurance, etc. to arrive at the overall transportation cost.

In more sophisticated embodiments of the invention, the system includes an interface to access an external source or sources of competitive product prices which provide sale prices of competitive goods associated with the selected goods at the various destination locations thereby to assist the user in making an informed decision as to whether the selected goods will be competitive in the market of the destination location.

Preferably, the system includes a search facility for searching relevant external data sources, e.g. web sites, portals, or the like, to obtain information for enhancing the estimation of the cost for transporting the goods from the selected source location to the selected destination location. The searching facility may be in the form of a search engine operable to search internal and/or external databases based on key words. When searching internal databases, the search engine may use key words/information to obtain data on, for example, rules in various countries relating to the transportation of goods, regulations affecting import/export restrictions, client profiles, look up tables or the like.

When searching external databases, the search engine may operate in a conventional way, e.g. in a similar way to YAHOO, using key words/icons to access and/or search for sources of information external to the system e.g. insurance brokers, shipping lines, airlines, commodity brokers, duties in various countries, or the like. Inputs from these external databases may be fed into the system for processing, merely be displayed for user reference, or the like. Thus, the system may by way of the search engine, icons, pull down menus or the like provide the user with access to various different web sites or portals.

In order to enhance user friendliness, the search facility may provide pull down menus to provide the user with access to a plurality of associated web sites or portals providing transportation cost data.

To facilitate global use, the system typically includes a web server hosting a web site with which the user interacts, the communication module being configured to communicate with the remote user device via the Internet. Accordingly, the system may include a web server hosting a web site wherein one or more users may log onto the web site, define at least the selected source location, the selected destination location, and the type of goods, and the site may then process the data.

Use of the system is preferably at a cost to the user. Accordingly, the system may include an accounting facility selectively to charge a user for use of the system. As the system is preferably configured for global trade, it may include a currency database and a convertor for converting various different currencies to a selected single currency e.g. US Dollars, British Pounds, or any other currency favoured in international trade. The method may include updating the currency database on a regular basis e.g. hourly, daily, or the like.

The accounting facility typically includes an accounting interface for interfacing the system to a financial institution such as a bank. Accordingly, payment for use of the system may be processed automatically.

The system may include a customer database for storing historical data on previous use of the system by users e.g. previous cost estimates, financial details, or the like to facilitate charging for use of the system.

In order to enhance the accuracy of the estimate, the system may include a breakpoint analysis module for taking conventional break points into account. The breakpoint analysis module may take ranges of weights and rates associated with the ranges into account e.g. a break point database including ranges of weights, e.g. 0-25 kg, and rates associated with the ranges, e.g. R20/kg (minimum R100.00).

In order further to enhance the accuracy of the estimate, the estimator may be operable to take consolidators of cargo into account. Likewise, the estimator may be operable to refine the cost estimate thereby to obtain a lower cost estimate by means of estimating the costs for different modes of transportation and delivery time constraints. Accordingly, the system may thus provide the user with a comparative cost of transporting the goods from the selected source location to the selected destination location.

Further in accordance with the invention, there is provided a method of processing data in a data processing system, the data being associated with the transportation of goods between a selected source location and a selected destination location, the method including

obtaining the selected source and destination locations from a user, the selected source and destination locations being one of the plurality of source and destination locations in a route database;

obtaining a selected type of goods from the user, the selected goods being one of a plurality of different types of goods listed in a goods database;

interrogating the route database based on the source and destination locations, and the goods database based on the selected type of goods; and

processing data retrieved from the route and goods databases to estimate the cost involved in transporting the selected goods from the selected source location to the selected destination location.

In certain embodiments, the data is processed at a central server which is operable to communicate with at least one remote user device, the selected source and destination locations and the type of goods being communicated to the central server from the user device via a communications network.

The method may include requesting a user to input data typically selected from the group consisting of purchase terms data, mode of transport data, currency data, cost of goods data, data on the weight of the goods, and data on the dimensions of the goods, and processing the data taking the input data into account.

The central server and the user device or devices preferably communicate via the Internet. However, in addition or instead, the method may be executed on a personal computer functioning as a stand-alone unit.

The data processed typically includes input data selected from the group consisting of purchase terms data, mode of transport data, currency data, cost of goods data, data on the weight of the goods, and data on the dimensions of the goods. At least cost data on a plurality of goods previously transported between the source and destination locations may be retrieved from the goods database. The goods database may be interrogated based on the selected goods and the method including retrieving cost data on at least associated

goods thereby to estimate the cost involved in transporting the selected goods between the selected source and destination locations.

Cost information for transporting various types of goods by at least one mode of transport selected from the group consisting of land (road and rail) transport, sea transport and air transport may be retrieved from a mode of transport database and may be processed to estimate the cost of transporting the goods.

The data for processing may be retrieved from at least one further database selected from the group consisting of

an ocean freight cost database including cost data for estimating the ocean freight costs associated with transporting the selected goods,

an airfreight cost database including cost data for estimating the airfreight associated with transporting the selected goods,

a railway cost database including cost data for estimating the railway cost associated with transporting the selected goods,

a road cost database including cost data for estimating the road cost associated with transporting the selected goods, and

an insurance cost database including cost data for estimating the cost of insuring the selected goods.

In order to enhance the accuracy of the estimate, data for processing may be retrieved from at least one database selected from the group consisting of

a packaging cost database including cost data for estimating the cost of packaging the selected goods,

a documentation cost database including cost data for estimating the cost of documentation associated with transporting the selected goods,

a handling depot cost database including cost data for estimating the cost associated with handling the selected goods,

a freight cost database including cost data for estimating the freight cost of the selected goods,

a customs cost database including cost data for estimating the customs costs associated with importing/exporting the selected goods,

a harbour/airport cost database including cost data for estimating harbour/airport costs associated with transporting the selected goods,

a finance cost database including cost data for estimating the cost of financing the selected goods, the finance cost database including confirming house costs and bank costs,

an agent/forwarder cost database including cost data for estimating the cost associated with the agent/forwarder of the selected goods, and

a legal database which includes legal data relevant to each particular type of goods, the legal database including data selected from the group consisting of taxes payable, laws and regulations relating to each type of goods, authorities providing approval for import or export of each type of goods and permits required.

The user will typically know, or have an estimate from the supplier of the goods, what the price of the goods will be and the terms of sale, e.g. in respect of INCOTERMS such as what the price is ex works or FOB or CIF, or the like. Accordingly, the method may include prompting a user to select purchase terms data defined in the form of conventional INCOTERMS.

The user may then enter the price of the goods and indicate or identify the terms to enable the system to calculate the cost of moving the goods from the source to destination locations. The price of the goods is typically needed to enable the system to calculate tax, duties and the like, and the terms (i.e. ex works, FOB, CIF, or the like) are required to inform the system that it does/does not have to add certain costs such as those mentioned below.

To facilitate decision making by a user, the method may include accessing sources of competitive product prices which provide sale prices of competitive goods associated with the selected goods at the various destination locations thereby to assist the user in making an informed decision as to whether the selected goods will be competitive in the market of the destination location.

Further, the method may include searching relevant external data sources to obtain information for enhancing the accuracy of the estimate of the cost for transporting the goods from the selected source location to the selected destination location.

The method preferably includes communicating with the remote user device via the Internet. Thus, the method may include the step of searching the system databases and the Internet.

The method may provide pull down menus to provide the user with access to a plurality of associated web sites or portals providing transportation cost data.

In a preferred embodiment, accounting functions may be performed selectively to charge a user provided with the cost estimate. The accounting functions may include, converting at least one different selected currency to a selected single currency. The accounting functions may include providing data to a financial institution for processing.

Historical data on previous use is preferably selectively stored and retrieved from a customer database.

Preferably, the processing may take conventional break points into account. The breakpoint analysis may take ranges of weights and rates associated with the ranges into account.

In certain embodiments, the estimate takes consolidators of cargo into account. In more sophisticated embodiments of the invention, the method includes refining the cost estimate to try and obtain a lower cost estimate. Accordingly, the method may include estimating the costs for different modes of transportation, delivery time constraints, different routes, or the like thereby to provide the user with a comparative cost of transporting the goods from the selected source location to the selected destination location. Thus the system and method may be used to cost alternative transportation scenarios based on selected user preferences e.g. cost or time sensitivity. Preferably, the method includes updating the various databases regularly as and when changes in costs occur.

Still further in accordance with the invention, there is provided a carrier medium carrying computer readable code for controlling a computer to carry out the method as hereinbefore described.

One or more of the following databases may be included to enhance the accuracy of estimating the costs incurred in a destination country:

a landing/shipping cost database including cost data for estimating the landing/shipping costs associated with transporting the selected goods;

a harbour/airport cost database including cost data for estimating the landing/shipping costs associated with transporting the selected goods;

a customs cost database including cost data for estimating the customs cost associated with importing the selected goods;

an agent/forwarder cost database including cost data for estimating the agent/forwarder costs associated with transporting the selected goods; and

a delivery cost database including cost data for estimating the cost of delivering the selected goods to the destination location.

The invention is now described, by way of example, with reference to the accompanying diagrammatic drawings.

In the drawings,

Figure 1 shows a schematic representation of a personal computer (PC) functioning as a stand-alone unit programmed to perform a method, in accordance with the invention, for estimating the costs in transporting goods between source and destination locations;

Figure 2 shows a schematic representation of various components of the PC which are used by a computer program, also in accordance with the invention, executing the method;

Figure 3 shows a schematic representation of a computer network defining a system, also in accordance with the invention, for estimating the costs in transporting goods between the source and destination locations;

Figure 4 shows a schematic block diagram of a data processing system in accordance with the invention;

Figure 5 shows a schematic block diagram of the method or process performed by the system of Figure 3;

Figure 6 shows a schematic block diagram of the development of the system;

Figure 7 shows a schematic block diagram of how the system is updated when it is operational;

Figure 8 shows a typical display of INCOTERMS Cost/Risk Distribution; and

Figures 9 to 15 show typical screen displays of the system.

Referring to the drawings, reference numeral 10 (see Figures 1 and 4) generally indicates a data processing system in accordance with the invention. As discussed in detail below, the system 10 allows a user to process data associated with the transportation of goods between a selected source location and a selected destination location thereby to provide a cost estimate per unit or batch of units. The system 10 may thus process transportation data to provide output data which may be used to assess a business opportunity. The processing of the data takes place in terms of a method implemented by

computer readable code provided on a carrier medium. The carrier medium may be a transient carrier, e.g. a communications signal or a storage medium such as a CD Rom, stiffy disk, or the like.

The system 10 includes a plurality of databases which may be individually defined or form part of a composite database. In particular, the system includes a legal or standards/regulations database 12, a customer database 14, an estimates database 16, an estimate criteria database 18, a schedule database 20, an advice/knowledge database 22, and an accounts database 24. The schedule database 20 includes, inter alia, conventional cost data associated with rail, shipping, air transportation, IMCO, INCOTERMS, country maps, or the like. The estimate criteria database 18 includes insurance charges, customs charges, freight charges (road, rail, sea, air), packing charges, warehousing charges, harbour/airfreight/rail/road handling charges, exchange rates, or the like.

In certain embodiments of the invention, the system 10 functions as a standalone system (see Figure 1) which can be run on a conventional personal computer (PC) e.g. a laptop computer or the like. In other embodiments, the system 10 is provided on a server connected to the Internet and, accordingly, may be accessed globally by a plurality of users 11, as shown in Figure 3. The users may be subscribers to the system e.g. they may have an account which is debited for use of the system 10. Accordingly, the system 10 includes a communications interface 26 for interfacing the system 10, for example, to the Internet in a conventional fashion. As shown in Figures 3 and 4, communication between the system 10 and a user 11 may be via any communication medium, e.g. e-mail, the Internet, WAP using a cellular telephone, SMS messages, a call centre, fax, or the like.

Referring in particular to Figure 4, the functionality and various components of the system 10 are now described with reference to a specific example. Assuming an entrepreneur or user walking through a trade show in Hannover, Germany, sees a commodity or goods that he thinks will sell well in America. In order to make an informed business decision whether or not to pursue the opportunity, he may use the system 10 to assess the economic feasibility of the opportunity. For example, the entrepreneur may then use his WAP enabled mobile phone to dial into the web site hosted by the system 10 via the communications interface 26. The system 10 then requests the user to identify a source location from which the commodity will be sourced, and a destination location (which may be the final location of the goods or commodity e.g. a retailer, wholesaler, or the like) as well as

the particular type of commodity or goods e.g. a pewter mug, lead, or the like. The cost of the commodity is also entered, e.g. using conventional INCOTERMS (see Figure 8).

The system 10 then interrogates a data import utility 30 and a data export utility 32 which includes history data relating to the same or similar data processing instructions previously processed by the system 10. If a similar instruction has been previously processed by the system, the data import and export utilities 30,32 provide a DM or USD or any other selected currency cost estimation, e.g. per $1m^3$ or 1000 kg of the commodity, for placing the commodity on the market in the selected destination location. However, if relevant data on an associated prior transaction is not located in the import and export utilities 30,32, the system 10 then accesses the schedule database 20 via a schedule retrieval application 34. In addition to data retrieved from the schedule database 20, the system 10 retrieves relevant predefined formulae from the criteria estimate database 18, via a criteria estimate retrieval application 36, and feeds the data into an estimator/estimate calculator 38. The estimate calculator calculates a cost estimate of the total cost involved in placing the commodity on the market at the selected destination location.

Once the cost estimate has been determined by the estimate calculator 38, it is communicated to the user via the communications interface 26. The steps carried out by the system 10, and the various hardware components employed in each step, are shown in Figure 5.

The system 10 preferably includes an account/financial management application 40 for processing financial data and charging users of the system 10. In certain embodiments, the system 10 is arranged to allow a first time user or "customer" a free cost estimate. Thereafter, a user is required to pay for use of the system 10. Accordingly, when a user logs onto the system 10, a payment processing application 42 is accessed which, together with the account/financial management application 40 and the accounts database 24, processes a fee.

The accounts database 24 and associated applications 40, 42 establish whether or not the user is

a) a first time user or customer;

b) a regular user or customer;

c) a subscription paid customer; or

d) a credit card payment customer.

In a preferred embodiment, the system 10 provides links to remote portals which may themselves provide relevant data or provide further links to other relevant portals e.g. a portal with a particular country's customs duties or several different countries' customs duties.

It is to be appreciated that a variety of different customer options may be available on the system 10. These customer options may then be used to process charges for services provided by the system 10. Customer data is preferably updated regularly and, accordingly, the system 10 includes a customer support application 44, a customer management application 46, and a personalisation engine application 48. These applications 44,46,48 update and personalise customer or user data stored in the customer database 14. Thus, the system 10 may personalise regular customer data and anticipate his/her future queries, direction, suggestions, routes, agents or the like. Customer profile data such as the type of commodity regularly transported by the user, a preferred transport medium, main trading areas, constant suppliers, brokers, frequency of shipments, or the like, may be stored in the customer database.

If the initial information processed by the system 10, and subsequently communicated to the user, appears to indicate a favourable business opportunity, the user or entrepreneur may then refine the input data to enhance the accuracy of the cost estimate processed by the system 10. Accordingly, the system 10 includes sub-databases which are included in the databases 12,14,16,18,20, and 22. The sub-databases include

a packaging cost database including cost data for estimating the cost of packaging the selected goods;

a documentation cost database including cost data for estimating the cost of preparing and obtaining documentation associated with transporting the selected goods e.g. certificate of origin, consular certificates, veterinary and plant permits/certificates, finance/bank documentation;

a road/rail transportation cost database including cost data for estimating the cost of transporting the selected goods by road and/or rail both nationally and internationally;

a handling depot cost database including cost data for estimating the cost associated with handling the selected goods;

a freight cost database including cost data for estimating the freight cost associated with shipping or airfreighting the selected goods;

a customs cost database including cost data for estimating the customs costs associated with importing/exporting the selected goods;

a harbour/airport cost database including cost data for estimating harbour/airport costs associated with transporting the selected goods;

a finance cost database including cost data for estimating the cost of financing the selected goods, the finance cost database may include confirming house costs, bank costs, or the like; and

an agent/forwarder cost database including cost data for estimating the cost associated with the agent/forwarder of the selected goods.

In order further to enhance the accuracy of the resultant cost estimate, the following additional sub-databases are typically provided in more sophisticated embodiments of the invention,

an ocean freight cost database including cost data for estimating the ocean freight costs associated with transporting the selected goods;

an airfreight cost database including cost data for estimating the airfreight associated with transporting the selected goods;

a railway cost database including cost data for estimating the railway cost associated with transporting the selected goods;

a road cost database including cost data for estimating the road cost associated with transporting the selected goods; and

an insurance cost database including cost data for estimating the cost of insuring the selected goods.

Thus, the system 10 may access further tables or the like stored in the various databases and, accordingly, the estimate calculator 38 selectively executes further calculations taking further factors which influence the transportation cost into account. For example, is the commodity "abnormal" by way of value per ton (1m^3 or 1000 kg), weight per square metre of the "footprint" of any single package, weight of individual packages, measurement (dimensions) of individual package(s) for rail/road/container movement, or the like? If so, specific scales of charges applicable to the specific nature of the "abnormality" are selectively accessed in a more sophisticated embodiment of the invention.

The estimate calculator 38 is operable to calculate the "Freight Ton" on which charges may be assessed and may reference "Stowage Factor" tables via the schedule retrieval application 34 and the schedule database 20. Further data is then retrieved from a standards/regulations management application 50 to obtain information on restrictions/rules relating to identifying non-standard items and related costs.

Once all such relevant data pertaining to the shipment of the commodity has been made available to the system, an advice engine application 52 can access the advice/knowledge database 22 to perform additional functions e.g. establish an optimum size of a shipment to achieve the optimum cost. Optimisation of the delivery of the commodity to the destination location includes access to all tables/databases and procedures/formulae described above. This optionally includes a software application to calculate "stowage". For example, the system 10 may process the data to calculate how many packages of X dimensions will fit into a 6 metre container and how they should be stowed in order to make maximum use of the interior cubic measurements of the particular container (and its weight restrictions).

Typically, the method or process described above relates to a particular transportation route e.g. by sea. However, the user may instruct the system 10 to process data on an alternate transportation route e.g. an estimate for air transport. In a preferred embodiment, the system 10 provides a comparison between the costs of various transportation options. This functionality is implemented by a decision support application 54 in combination with the advice engine application 52.

The system includes a search engine application 58 operable to process data on, for example:

1. Insurance Brokers and their related valuation, and premium and risk rules;
2. Customs and Excise Taxes and Duties and their related valuation, ad valorem, and rated duties/taxes;
3. Shipping Lines and the like;
4. Airlines and the like; and
5. Sea, air, rail and road routes.

The search engine application 58 is configured to search all internal databases and applications as well as external databases. In certain embodiments, the search engine

application 58 may access different shipping lines, e.g. conference, non-conference, tramp ships, bulk carriers, or the like. Similarly, the application 58 may access insurance brokers or the like.

The schedule database 20 includes "shipping" schedules identifying what vessels call at one or more ports in a source country (in which the selected source location is situated) and a destination country (in which the selected destination location is situated), frequency of sailing of vessels and the like. In a similar fashion, the aforementioned information is provided for airlines. In certain embodiments, similar schedules are accessed by means of ICONS on a screen of a user PC which communicate with conventional portals owned by shipping/air lines. Accordingly, the system 10 allows comparisons between estimated costs for different route/sailing options thereby to suggest a recommended route along which costs are minimised. Figures 6 and 7 are schematic block diagrams of development of the system 10, and of how the system 10 is updated when it is operational.

The system 10 obtains its input data and displays its output data to the user by means of successive screens (see Figures 6 to 10 for example screens) provided on the web site. Since the system 10 offers its functionality via a web site, global access may be obtained. Accordingly, various language and currency options may be provided. It is believed that, as the functionality of the system 10 is accessible globally, it provides a powerful tool to assist management decisions to move goods internationally. The system 10 may, however, function as a standalone unit.

In order to provide an enhanced understanding of the system 10 and the computer program product, both in accordance with the invention, the following summary is provided.

A "Customer" accesses the system 10 and interacts with the computer program product typically via an Internet Web Page using any computer device, e.g. personal computer, a PD, a cell phone, or the like (see applications 26 and 28).

The welcome screen (see Figure 9) typically provides two options:

1) A further explanation of the service being provided (see Figure 10); and

2) A request to estimate the costs involved in moving/transporting goods from an origin/source country/location to a destination country/location (see applications 26 and 28).

If option 1 is chosen, two further options allow the customer (via application 26 and 28) to:

exit; or

proceed with the calculation of an estimate.

If option 2 is chosen, the system 10 with the computer program product running thereon establishes:

- If this is the customer's first enquiry and, if so, the use of the system is optionally at no cost to the user/customer for this particular enquiry; and
- whether the customer has a customer identification, which establishes or defines the method or procedure of customer invoicing and payment, and provides access to the customer profile for information on any previous enquiries and information which may facilitate the current enquiry.

(see applications 48, 46, 44, 40, 42, and 38, and databases 14 and 24).

The initial "Questionnaire" or data entry form screen (see Figure 11) is then presented to obtain the required data from the customer or user and the system 10 and its program proceeds as follows:

An option exists for the customer to make a choice between the standard English language version or one of the main languages which optionally include French, German, Italian, Spanish, Portuguese, Japanese, or Chinese thereby to facilitate the global reach and use of the system 10 and its website (see applications 26 and 28).

The answers/data fed into the system 10 by the customer allows the system 10 to provide a cost estimate taking the following into account:

Commodity = Accesses schedules (see database 18) to retrieve data on:

- Ocean freight and airfreight tariffs per carrier per selected route - origin/source to destination countries.

- Ocean freight and airfreight tariffs per carrier per selected route - origin/source to destination countries.
- Rail and road freight tariffs per carrier per selected countries - origin and destination.
- Selected countries port/harbour/airport tariffs.
- IMDG Regulations i.e. International Schedule listing Hazardous Commodities.

(see applications 36, 34, 38 and databases 18, and 20).

Purchase Terms = Accesses a schedule containing all trade terms published by the International Chamber of Commerce i.e. "Guide to Incoterms 1990" which is updated in accordance with later published amendments/issues. A specific term e.g. F.O.B. (Free on Board) provides specific parameters of what costs are to be included/excluded from the required estimate (see application 34 and databases 20 ans 22).

Mode of Transport = Determines either sea or air mode for the initial estimate and/or Uses both to serve as comparison for refined estimate (see applications 36, 34 and 38, and databases 18 and 20).

Currency = Defines

a) The currency to be used for estimate purposes e.g. US dollars, SA Rand etc.

b) The currency applicable to the "Cost of Goods" at the point defined in the INCOTERMS schedule referred to in "Purchase Terms" above.

c) The rate/s of exchange to be used between the currency of the cost of goods, the currency of carrier(s) freight charges, and the currency required for the estimated costs. Accesses tables containing rates of exchange per currency per country.

(see applications 36 and 34, and databases 18 and 20).

Weight and

Measurements = "Mass and Dimensions" are initially estimated for the total anticipated shipment.

When refinement of the estimate is requested, individual package/item mass and dimensions are inserted -

a) To determine abnormal loads i.e. total weight, weight "foot print", height, width, length restrictions per individual country's rules and regulations affecting road/rail widths, tunnels, bridges, overhead power lines etc.

b) To calculate an optimum stowage plan per selected ISO transport container.

c) To calculate minimum charges if the intended shipment falls into this category.

(see applications 36 and 34, and databases 18 and 20)

Country of Origin = a) The system displays an appropriate map of that country showing all main towns and centres (see Figure 12). Customer places cursor/mouse pointer on point of origin, or selects origin from drop down menu. System 10 accesses country tables of internal transportation routes to the export point and calculates costs.

b) The system 10 then accesses country tables relating to Customs and export documentation and calculates costs.

c) The system 10 also accesses tables relating to harbour/airport charges and calculates costs.

d) Appropriate web sites are accessed for assessment and calculation of Customs taxes, insurance cover and premiums, etc.

(see applications 36, 34 and 58 and databases 18 and 20).

Country of Destination = a) The system 10 provides a map of that country showing all main towns and centres. Customer places cursor/mouse pointer on point of destination or selects from drop down menu. The system 10 then accesses

country tables of internal transportation routes from point of import to delivery point and calculates costs.

a) Country tables relating to Customs and import documentation are then accessed and the costs are calculated.

b) Links to appropriate web sites are optionally accessed for assessment and the system 10 then calculates Customs duties and taxes, import rules, regulations and requirements relating to the commodity.

(see applications 36, 34 and 38 and databases 18 and 20).

Calculation of Estimate

= All relevant information and costs assessed are then:

a) Collated to provide the first estimated cost

b) Stored in Customer's data and profile files for possible subsequent access and use

c) Filtered for the answer to the Customer enquiry e.g. first estimate requested by any customer may be free and system 10 needs to access data to perform this function as well as

- to confirm customer invoicing and payment procedures
- to process customer invoicing and payment

(see applications 36, 44, 46, 48, 40, 42 and 48 and databases 14, 18 and 24).

d) If further refinement of the estimate is required, the screen (see Figure 11) re-appears with all the previous information inserted, but with drop down menus relating to the additional information required e.g.

= Commodity
- a) if hazardous
- b) if perishable
- c) if special handling/storage
- d) if abnormal
- e) etc.

= Weight
- a) of individual packages and/or

b) "Abnormal" packages (parameters per country will also appear as guidelines)

= Measurement a) dimensions of individual packages and/or

b) "Abnormal" packages (parameters per country will appear as guidelines)

= Insurance a) Insurance risk/cover required

b) Insurance value e.g. landed cost plus 15%

(see applications 34, 36, 58 and 48, and databases 20 and 18).

e) The system 10 then reprocesses, recalculates the estimate, provides suggestions/recommendations e.g. optimum shipment size, advantageous routes, comparison of costs between air and sea, container stowage, listing of applicable rules and regulations, etc. based on the information stored in its databases and obtained via the communications interface 26.

(see applications 38 and 52, and database 22).

f) System provides the customer with ability to transfer data generated by the system 10 to a selected Freight Forwarder (via drop down menu) who then uses the data to negotiate final costs with carriers and arrange physical movement of the commodity and also process all transportation and customs documentation.

(see application 26 and database 14)

In order to determine the cost of transporting any goods or commodities, particularly across international boundaries involving sea or air passage, many factors have to be taken into account. In order to determine this cost, a substantial administrative structure is usually necessary to satisfy the question, "how much will it cost to move a given quantity of goods from a selected source location (e.g. Pretoria) to a selected destination location (e.g. Chicago)?" Further questions may arise such as "can I improve on this costing and achieve a lower unit cost at destination?", "what regulations, laws, taxes, permits, authorities, etc. could affect this transaction?", "will my product be cost competitive in the country of destination?". It is believed that the system 10 facilitates the costing process and facilitates the provision of answers to these questions.

Conventionally, in order to answer the first question, i.e. How much will it cost me (or company X) to transport goods from (taking South Africa to America as an example) Pretoria to Chicago by sea?, the following procedure may be followed. At present, the norm is for a potential exporter in South Africa who does not have easy access to information sources, to contact a variety of different persons to evaluate a business opportunity e.g. contact a company within the Customs Clearing and Forwarding and Shipping Industry and ask various questions.

The forwarding company (F) will require to know:-

- the commodity
- the value of the commodity at a given point, e.g. ex works
- the mass of the commodity
- the measurement of the commodity
- any peculiarities of the commodity, i.e. is it hazardous, what is its flashpoint, is it perishable, does it require special packing, marking, identification, storage, or the like?
- the source (physical address) of the commodity
- the destination (physical address) of the commodity
- is transport to be accomplished by sea or air or rail or any other mode?

Company F, through its normal business, then has to access different information sources in order to amass the total information not necessarily in the following order:-

- Contacting a cartage and/or packaging company to quote a price for uplifting the commodity from the factory of company X, packing it in a manner sufficient to withstand, for example the hazards of a sea voyage, and delivering it to a depot, e.g. rail depot for onward carriage to a sea port.
- Contacting a "long haul Haulier/Transport Company" to quote for moving the goods from, say the Pretoria Depot (a town in the hinterland) of the first packaging/transporting company, to Durban (a selected sea port) by road.
- Optionally contacting the South African Railways to establish the cost of the commodity which is to be moved from Pretoria to Durban by rail.
- Two or more quotes for comparison so as to decide the best route and taking this cost into account in the quote to company X.

- Referring to various tables published by the South African Harbours to establish the charges applicable to the commodity for moving them through the Harbour facilities and loading them onto the ship.

These tables can include:-

a) an ad valorem percentage of a calculated value at that point in the transportation process.

b) an amount calculated per "Harbour Ton".

c) additional charges that may be levied by the nature of the goods, e.g. perishable/hazardous, abnormal by weight or measurement, etc.

The "Harbour Ton" is usually deemed to be either $1m^3$ or 1000 kg whichever yields the highest revenue to the Harbour, with a few exceptions where certain commodities have been allocated their equivalent of the harbour ton in defined tables, e.g. 500 kg of lead ingots may be equivalent to a Harbour Ton.

- Contacting shipping lines to establish what freight rate (which could also involved a minimum charge) will apply if the goods were moved from Durban to Chicago in their vessel. This freight rate is normally quoted in US Dollars and therefore also involves the inclusion of a rate of exchange to be applied on the date of payment.

The freight rate may be quoted

1) on the given commodity,

2) on a "free-all-kinds" (FAK) rate,

3) on an LCL (less than container load),

4) on an FCL (full container load),

5) using any other conventional techniques.

As a norm, general cargo containers are in two configurations, i.e. 6 metre and 12 metre containers. The 6 metre is referred to as a TEU (a twenty foot equivalent). The total mass/measurement that may be safely loaded and transported is dictated by international regulations covering each of these two configurations. A stowage database may include relevant data so that these factors may be taken into account by the system 10.

Numerous "special" containers exist, i.e. refrigerated, removable sides, open top, flat (only four corner posts), insulated, fruit, liquid tankers, etc. etc.

The shipping line may have a vessel sailing to the nominated destination, i.e. Chicago, or depending on the winter season when the Great Lakes are closed to shipping, may have to carry the cargo to the port nearest the final destination - say New York. In this event the transport overland (by rail or road) may have to be included in the freight rate or added in as an additional factor.

If the commodity being shipped is less than a full container load and if the shipping line does not cater for this type of traffic, a company specialising in consolidating small cargoes until they fill a container, may have to be contacted and they would quote an applicable freight rate including their consolidation costs.

- Contacting an Insurance Company or Broker and getting a rate to cover the risks requested by the Company X and then establishing an overall insured value on which to base the premium.
- Contacting an agent - in Chicago or New York, to establish
    a) Chicago and/or New York Port charges for landing the cargo;
    b) Local handling and/or transport charges;
    c) Any Customs taxes which may apply;
    d) The agents' charges for assisting in the Customs clearing process.
- Calculating Company F's charges for exporting the cargo, arranging Custom, Harbour and Shipping Line documentation.

Obtaining and processing the above information in order to obtain a quote or cost estimate for Company X, e.g. a cost estimate of R12501.00 to move Glassware of $3m^3$ (4100 kg) from Pretoria delivered to Chicago, can be a lengthy, costly and time consuming process. The resultant cost estimate obtained from the abovementioned investigation may indicate that the opportunity is not worthwhile and, accordingly, the time spent on gathering information manually from the various parties was thus wasted.

It is to be appreciated that the source and destination locations need not necessarily be located in different countries. For example, the system 10 may be used in domestic transport such as state to state transport in the USA, province to province, town to town or the like. Thus the transportation may take place within a country's borders. Further, the mode of transport may be a single mode of transport or multi-modal.

Relevant information, to assess the opportunity using prior art methods, is not easily available to any importer/exporter/entrepreneur /manufacturer. However, by means of the data processing system 10, the opportunity may be assessed more effectively and relatively rapidly provide cost information to user.

CLAIMS:

1. A data processing system for estimating the cost involved in transporting goods between a selected source location and a selected destination location, the system including

a communication module for communicating with a user to obtain at least the selected source location, the selected destination location, and a selected type of goods;

a database including

a route database in which a plurality of source and destination locations are provided, the selected source and destination locations being one of the plurality of source and destination locations; and

a goods database in which a plurality of different types of goods are listed; and

an estimator operable to interrogate the goods database and the route database and estimate the cost involved in transporting the selected type of goods between the selected source location and the selected destination location and communicate the estimation to the user.

2. A system as claimed in Claim 1, which defines a central server, the system including a plurality of remote user devices which communicate with the central server via the communication module of the central server via a communications network.

3. A system as claimed in Claim 2, in which the communications network is the Internet.

4. A system as claimed in Claim 1, in which the system is a stand-alone unit in the form of a personal computer.

5. A system as claimed in any one of the preceding claims, in which the input data is selected from the group consisting of purchase terms data, mode of transport data, currency data, cost of goods data, data on the weight of the goods, and data on the dimensions of the goods.

6. A system as claimed in any one of the preceding claims, in which the goods database includes at least cost data on a plurality of goods previously transported between the source and destination locations, the system being configured to interrogate the goods database based on the selected goods and retrieve cost data on at least associated goods

thereby to estimate the cost involved in transporting the selected goods between the selected source and destination locations.

7. A system as claimed in any one of the preceding claims, which includes a mode of transport database providing cost information for transporting various types of goods by at least one mode of transport selected from the group consisting of land transport, rail transport, sea transport and air transport.

8. A system as claimed in Claim 7, in which the mode of transport database includes at least one further database selected from the group consisting of

an ocean freight cost database including cost data for estimating the ocean freight costs associated with transporting the selected goods,

an airfreight cost database including cost data for estimating the airfreight associated with transporting the selected goods,

a railway cost database including cost data for estimating the railway cost associated with transporting the selected goods,

a road cost database including cost data for estimating the road cost associated with transporting the selected goods, and

an insurance cost database including cost data for estimating the cost of insuring the selected goods.

9. A system as claimed in any one of the preceding claims, which includes at least one database selected from the group consisting of

a packaging cost database including cost data for estimating the cost of packaging the selected goods,

a documentation cost database including cost data for estimating the cost of documentation associated with transporting the selected goods,

a handling depot cost database including cost data for estimating the cost associated with handling the selected goods,

a freight cost database including cost data for estimating the freight cost of the selected goods,

a customs cost database including cost data for estimating the customs costs associated with importing/exporting the selected goods,

a harbour/airport cost database including cost data for estimating harbour/airport costs associated with transporting the selected goods,

a finance cost database including cost data for estimating the cost of financing the selected goods, the finance cost database including confirming house costs and bank costs,

an agent/forwarder cost database including cost data for estimating the cost associated with the agent/forwarder of the selected goods, and

a legal database which includes legal data relevant to each particular type of goods, the legal database including data selected from the group consisting of taxes payable, laws and regulations relating to each type of goods, authorities providing approval for import or export of each type of goods and permits required.

10. A system as claimed in Claim 9, in which the purchase terms data are defined in the form of conventional INCOTERMS.

11. A system as claimed in any one of the preceding claims, which includes an interface to access sources of competitive product prices which provide sale prices of competitive goods associated with the selected goods at the various destination locations thereby to assist the user in making an informed decision as to whether the selected goods will be competitive in the market of the destination location.

12. A system as claimed in Claim 11, which includes a search facility for searching relevant external data sources to obtain information for enhancing the estimation of the cost for transporting the goods from the selected source location to the selected destination location.

13. A system as claimed in Claim 12, which includes a web server hosting a web site with which the user interacts, the communication module being configured to communicate with the remote user device via the Internet.

14. A system as claimed in Claim 13, in which the search facility is configured to search the system databases and the Internet.

15. A system as claimed in Claim 14, in which the search facility provides pull down menus to provide the user with access to a plurality of associated web sites or portals providing transportation cost data.

16. A system as claimed in any one of the preceding claims, which includes an accounting facility selectively to charge a user for use of the system.

17. A system as claimed in Claim 16, which includes a currency database and a convertor for converting various different currencies to a selected single currency.

18. A system as claimed in Claim 17, in which the accounting facility includes an accounting interface for interfacing the system to a financial institution.

19. A system as claimed in any one of the preceding claims, which includes a customer database for storing historical data on previous use of the system by users.

20. A system as claimed in any one of the preceding claim, which includes a breakpoint analysis module for taking conventional break points into account.

21. A system as claimed in Claim 20, in which the breakpoint analysis module takes ranges of weights and rates associated with the ranges into account.

22. A system as claimed in any one of the preceding claims, in which the estimator is operable to take consolidators of cargo into account.

23. A system as claimed in any one of the preceding claims, in which the estimator is operable to refine the cost estimate thereby to obtain a lower cost estimate by means of estimating the costs for different modes of transportation and delivery time constraints thereby to provide the user with a comparative cost of transporting the goods from the selected source location to the selected destination location.

24. A method of processing data in a data processing system, the data being associated with the transportation of goods between a selected source location and a selected destination location, the method including

obtaining the selected source and destination locations from a user, the selected source and destination locations being one of the plurality of source and destination locations in a route database;

obtaining a selected type of goods from the user, the selected goods being one of a plurality of different types of goods listed in a goods database;

interrogating the route database based on the source and destination locations, and the goods database based on the selected type of goods; and

processing data retrieved from the route and goods databases to estimate the cost involved in transporting the selected goods from the selected source location to the selected destination location.

25. A method as claimed in Claim 24, in which the data is processed at a central server which is operable to communicate with at least one remote user device, the selected source and destination locations and the type of goods being communicated to the central server from the user device via a communications network.

26. A method as claimed in Claim 24 or Claim 25, which includes requesting a user to input data, the input data being selected from the group consisting of purchase terms data, mode of transport data, currency data, cost of goods data, data on the weight of the goods, and data on the dimensions of the goods, and processing the data taking the input data into account.

27. A method as claimed in Claim 26, in which the central server and the user device communicate via the Internet.

28. A method as claimed in any one of the preceding claims 24 to 27 inclusive, which is executed on a personal computer functioning as a stand-alone unit.

29. A method as claimed in any one of the preceding claims 24 to 28 inclusive, in which the data processed includes input data selected from the group consisting of purchase terms data, mode of transport data, currency data, cost of goods data, data on the weight of the goods, and data on the dimensions of the goods.

30. A method as claimed in any one of the preceding claims 24 to 29 inclusive, in which at least cost data on a plurality of goods previously transported between the source and destination locations is retrieved from the goods database, the goods database being interrogated based on the selected goods and the method including retrieving cost data on at least associated goods thereby to estimate the cost involved in transporting the selected goods between the selected source and destination locations.

31. A method as claimed in any one of the preceding claims 24 to 30 inclusive, in which cost information for transporting various types of goods by at least one mode of transport selected from the group consisting of land transport, rail transport, sea transport and air transport is retrieved from a mode of transport database and which is processed to estimate the cost of transporting the goods.

32. A method as claimed in Claim 31, in which data for processing is retrieved from at least one further database selected from the group consisting of

an ocean freight cost database including cost data for estimating the ocean freight costs associated with transporting the selected goods,

an airfreight cost database including cost data for estimating the airfreight associated with transporting the selected goods,

a railway cost database including cost data for estimating the railway cost associated with transporting the selected goods,

a road cost database including cost data for estimating the road cost associated with transporting the selected goods, and

an insurance cost database including cost data for estimating the cost of insuring the selected goods.

33. A method as claimed in any one of the preceding claims 24 to 32 inclusive, in which data for processing is retrieved from at least one database selected from the group consisting of

a packaging cost database including cost data for estimating the cost of packaging the selected goods,

a documentation cost database including cost data for estimating the cost of documentation associated with transporting the selected goods,

a handling depot cost database including cost data for estimating the cost associated with handling the selected goods,

a freight cost database including cost data for estimating the freight cost of the selected goods,

a customs cost database including cost data for estimating the customs costs associated with importing/exporting the selected goods,

a harbour/airport cost database including cost data for estimating harbour/airport costs associated with transporting the selected goods,

a finance cost database including cost data for estimating the cost of financing the selected goods, the finance cost database including confirming house costs and bank costs,

an agent/forwarder cost database including cost data for estimating the cost associated with the agent/forwarder of the selected goods, and

a legal database which includes legal data relevant to each particular type of goods, the legal database including data selected from the group consisting of taxes payable, laws and regulations relating to each type of goods, authorities providing approval for import or export of each type of goods and permits required.

34. A method as claimed in Claim 33, which includes prompting a user to select purchase terms data defined in the form of conventional INCOTERMS.

35. A method as claimed in any one of the preceding claims 24 to 34 inclusive, which includes accessing sources of competitive product prices which provide sale prices of competitive goods associated with the selected goods at the various destination locations thereby to assist the user in making an informed decision as to whether the selected goods will be competitive in the market of the destination location.

36. A method claimed in Claim 35, which includes searching relevant external data sources to obtain information for enhancing the accuracy of the estimate of the cost for transporting the goods from the selected source location to the selected destination location.

37. A method as claimed in Claim 36, which includes communicating with the remote user device via the Internet.

38. A method as claimed in Claim 37, which searches the system databases and the Internet.

39. A method as claimed in Claim 38, which provides pull down menus to provide the user with access to a plurality of associated web sites or portals providing transportation cost data.

40. A method as claimed in any one of the preceding claims 24 to 39 inclusive, which performs at least accounting functions selectively to charge a user provided with the cost estimate.

41. A method as claimed in Claim 40, which converts at least one different selected currency to a selected single currency.

42. A method as claimed in Claim 40 or Claim 41, in which the accounting functions include providing data to a financial institution for processing.

43. A method as claimed in any one of the preceding claims 24 to 42 inclusive, in which historical data on previous use is selectively stored and retrieved from a customer database.

44. A method as claimed in any one of the preceding claims 24 to 43 inclusive, in which the processing takes conventional break points into account.

45. A method as claimed in Claim 44, in which the breakpoint analysis takes ranges of weights and rates associated with the ranges into account.

46. A method as claimed in any one of the preceding claims 24 to 45 inclusive, in which the estimate takes consolidators of cargo into account.

47. A method as claimed in any one of the preceding claims 24 to 46, which includes refining the cost estimate to try and obtain a lower cost estimate, the method including estimating the costs for different modes of transportation and delivery time constraints thereby to provide the user with a comparative cost of transporting the goods from the selected source location to the selected destination location.

48. A carrier medium carrying computer readable code for controlling a computer to carry out the method of any one of claims 24 to 47 inclusive.

49. A data processing system, substantially as herein described and illustrated.

50. A method of processing data in a data processing system, substantially as herein described and illustrated.

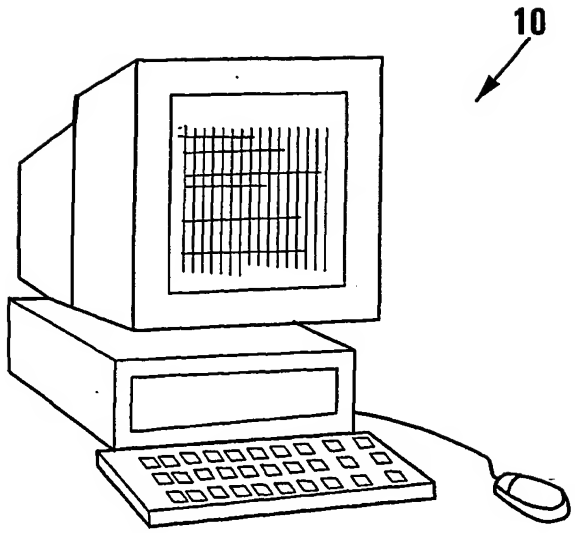

10

FIG 1

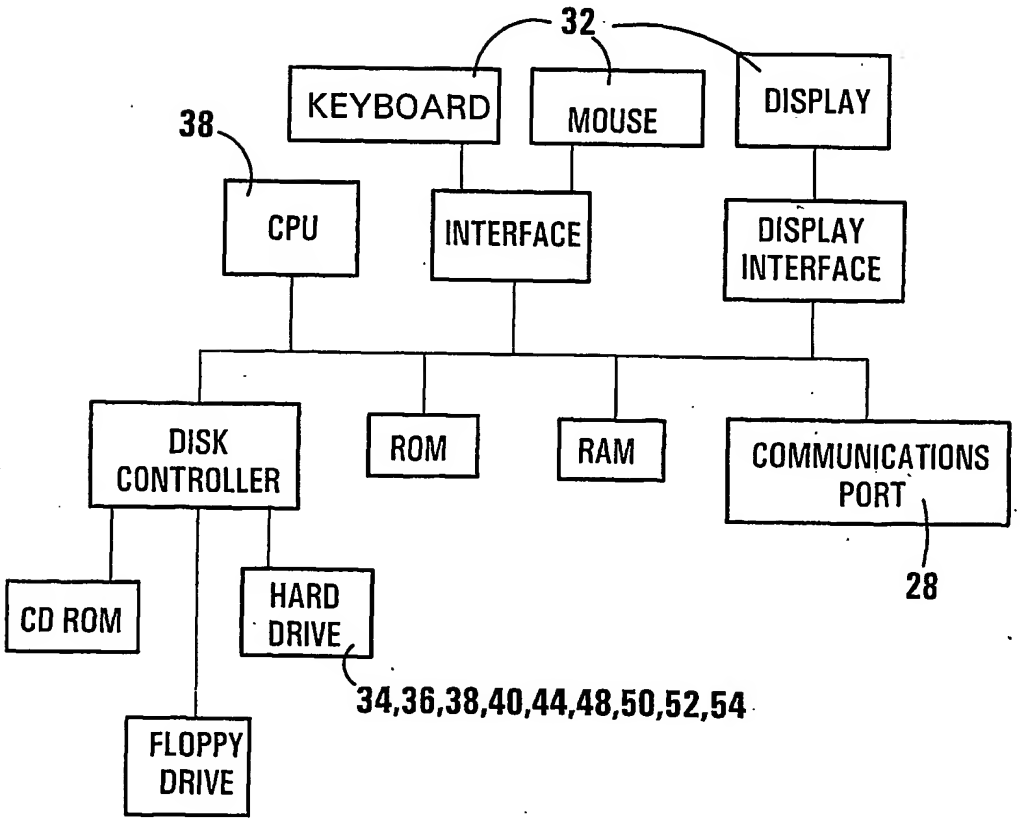

32
KEYBOARD
MOUSE
DISPLAY
38
CPU
INTERFACE
DISPLAY INTERFACE
DISK CONTROLLER
ROM
RAM
COMMUNICATIONS PORT
28
CD ROM
HARD DRIVE
34,36,38,40,44,48,50,52,54
FLOPPY DRIVE

FIG 2

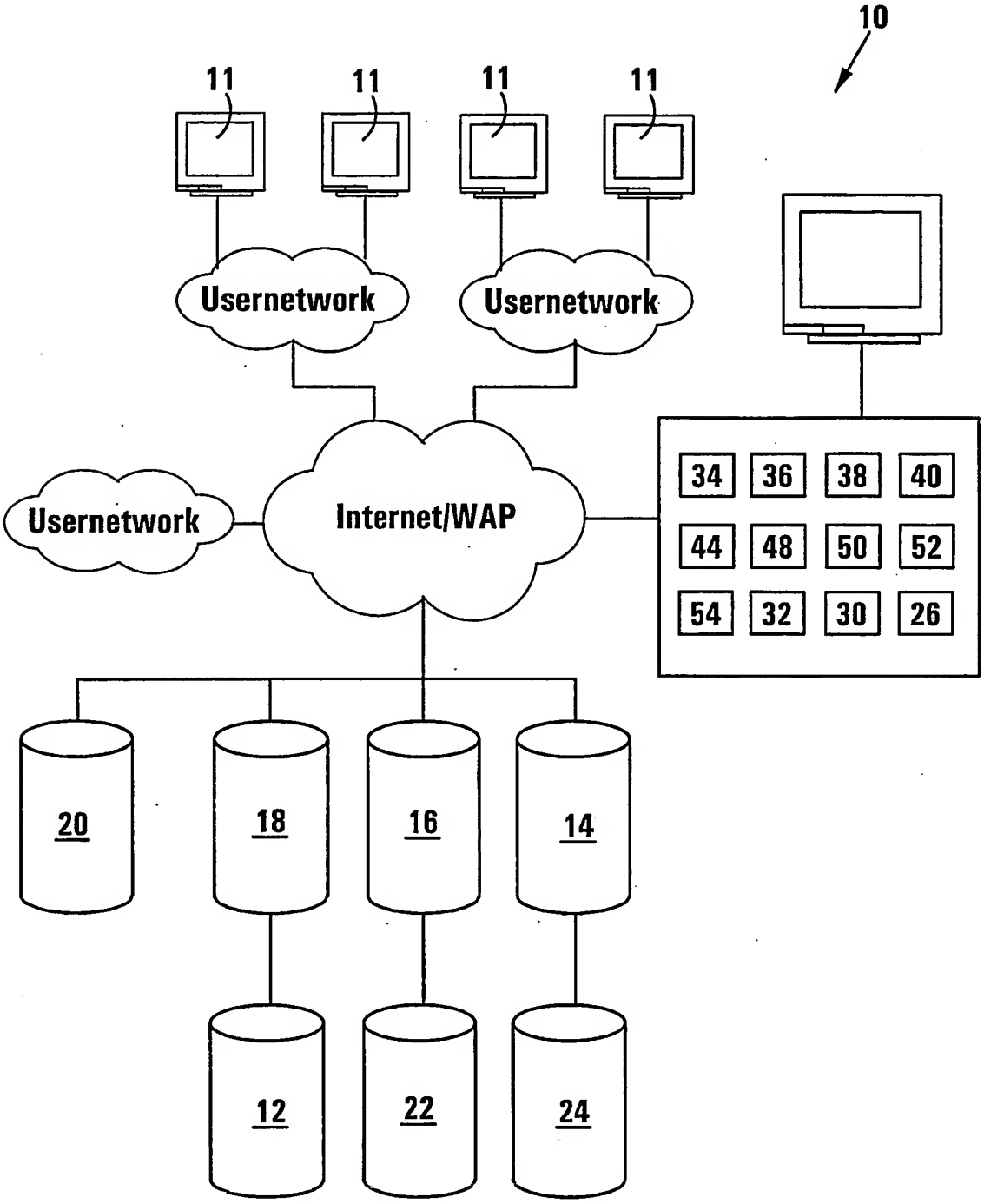
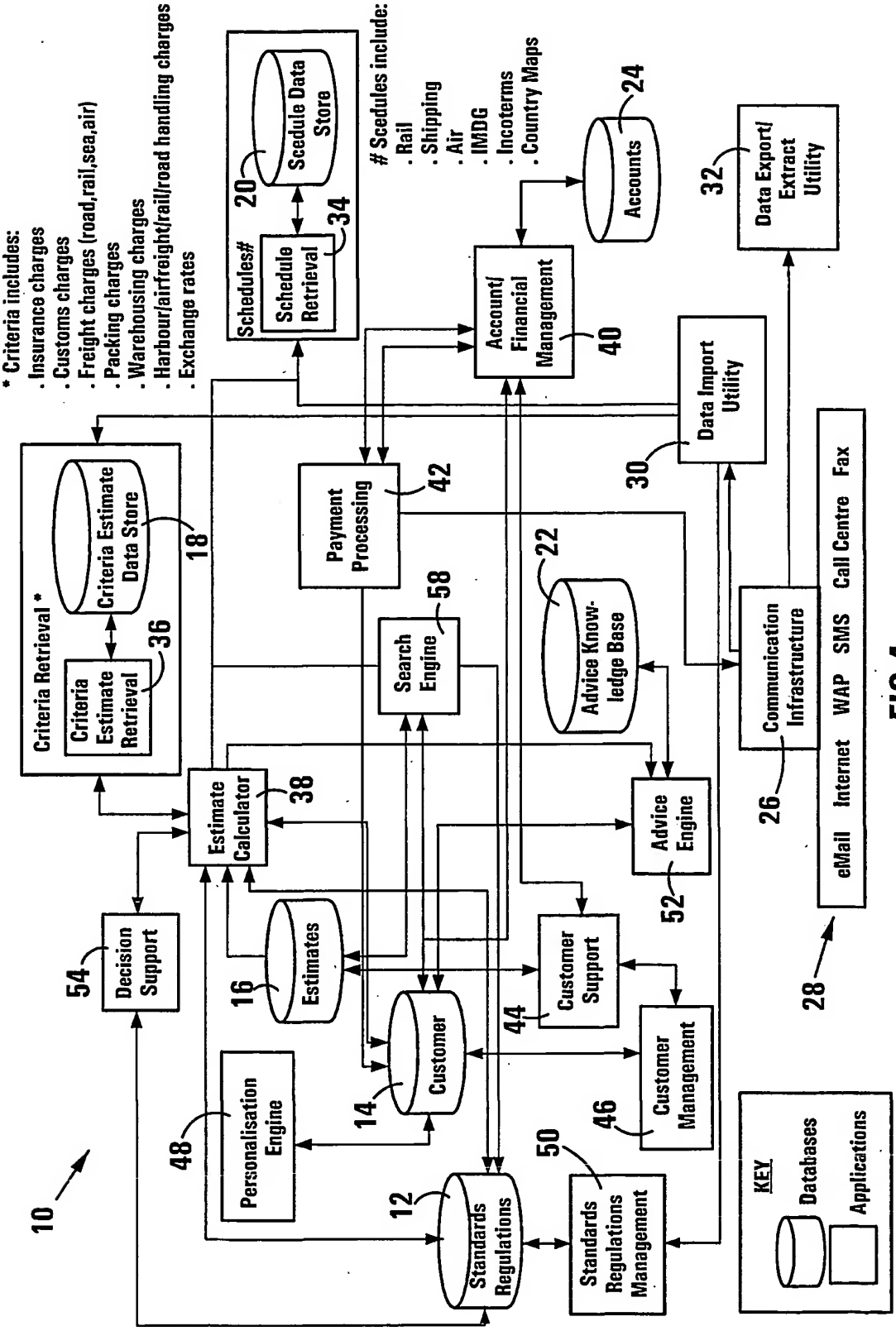

10
11
11
11
11
Usernetwork
Usernetwork
Usernetwork
Internet/WAP
34
36
38
40
44
48
50
52
54
32
30
26
20
18
16
14
12
22
24

FIG 3


* Criteria includes:
. Insurance charges
. Customs charges
. Freight charges (road,rail,sea,air)
. Packing charges
. Warehousing charges
. Harbour/airfreight/rail/road handling charges
. Exchange rates
Scedules include:
. Rail
. Shipping
. Air
. IMDG
. Incoterms
. Country Maps
Schedules#
Schedule Retrieval
34
Scedule Data Store
20
Accounts
24
Data Export/ Extract Utility
32
Account/ Financial Management
40
Data Import Utility
30
Criteria Retrieval *
Criteria Estimate Retrieval
36
Criteria Estimate Data Store
18
Payment Processing
42
Search Engine
58
Advice Know-ledge Base
22
Communication Infrastructure
26
eMail Internet WAP SMS Call Centre Fax
28
Estimate Calculator
38
Advice Engine
52
Decision Support
54
Estimates
16
Customer Support
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Customer
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Customer Management
46
Personalisation Engine
48
Standards Regulations
12
Standards Regulations Management
50
10
KEY
Databases
Applications

FIG 4

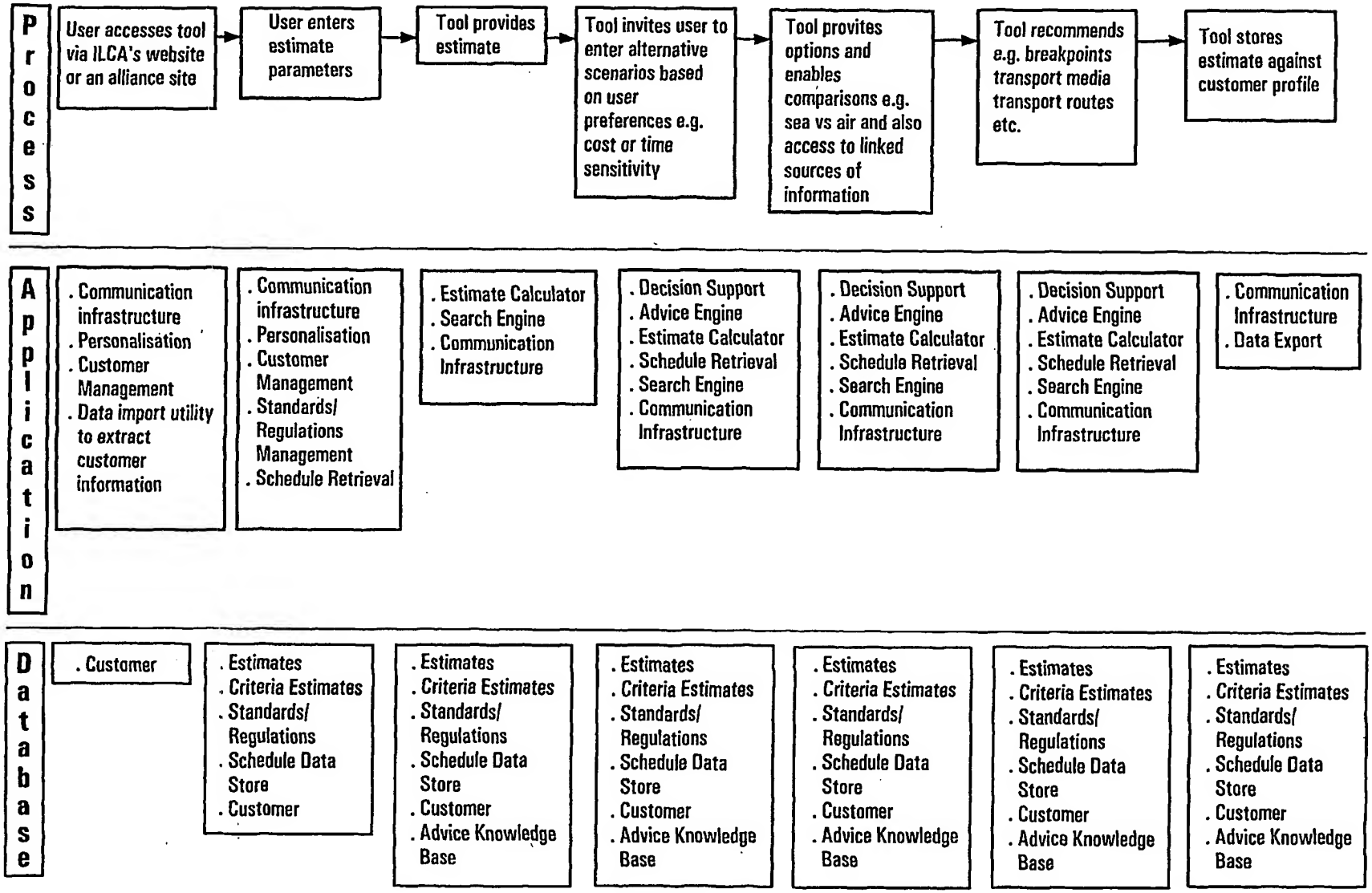

Process
User accesses tool via ILCA's website or an alliance site
User enters estimate parameters
Tool provides estimate
Tool invites user to enter alternative scenarios based on user preferences e.g. cost or time sensitivity
Tool provites options and enables comparisons e.g. sea vs air and also access to linked sources of information
Tool recommends e.g. breakpoints transport media transport routes etc.
Tool stores estimate against customer profile
Application
. Communication infrastructure . Personalisation . Customer Management . Data import utility to extract customer information
. Communication infrastructure . Personalisation . Customer Management . Standards/ Regulations Management . Schedule Retrieval
. Estimate Calculator . Search Engine . Communication Infrastructure
. Decision Support . Advice Engine . Estimate Calculator . Schedule Retrieval . Search Engine . Communication Infrastructure
. Decision Support . Advice Engine . Estimate Calculator . Schedule Retrieval . Search Engine . Communication Infrastructure
. Decision Support . Advice Engine . Estimate Calculator . Schedule Retrieval . Search Engine . Communication Infrastructure
. Communication Infrastructure . Data Export
Database
. Customer
. Estimates . Criteria Estimates . Standards/ Regulations . Schedule Data Store . Customer
. Estimates . Criteria Estimates . Standards/ Regulations . Schedule Data Store . Customer . Advice Knowledge Base
. Estimates . Criteria Estimates . Standards/ Regulations . Schedule Data Store . Customer . Advice Knowledge Base
. Estimates . Criteria Estimates . Standards/ Regulations . Schedule Data Store . Customer . Advice Knowledge Base
. Estimates . Criteria Estimates . Standards/ Regulations . Schedule Data Store . Customer . Advice Knowledge Base
. Estimates . Criteria Estimates . Standards/ Regulations . Schedule Data Store . Customer . Advice Knowledge Base

FIG 5

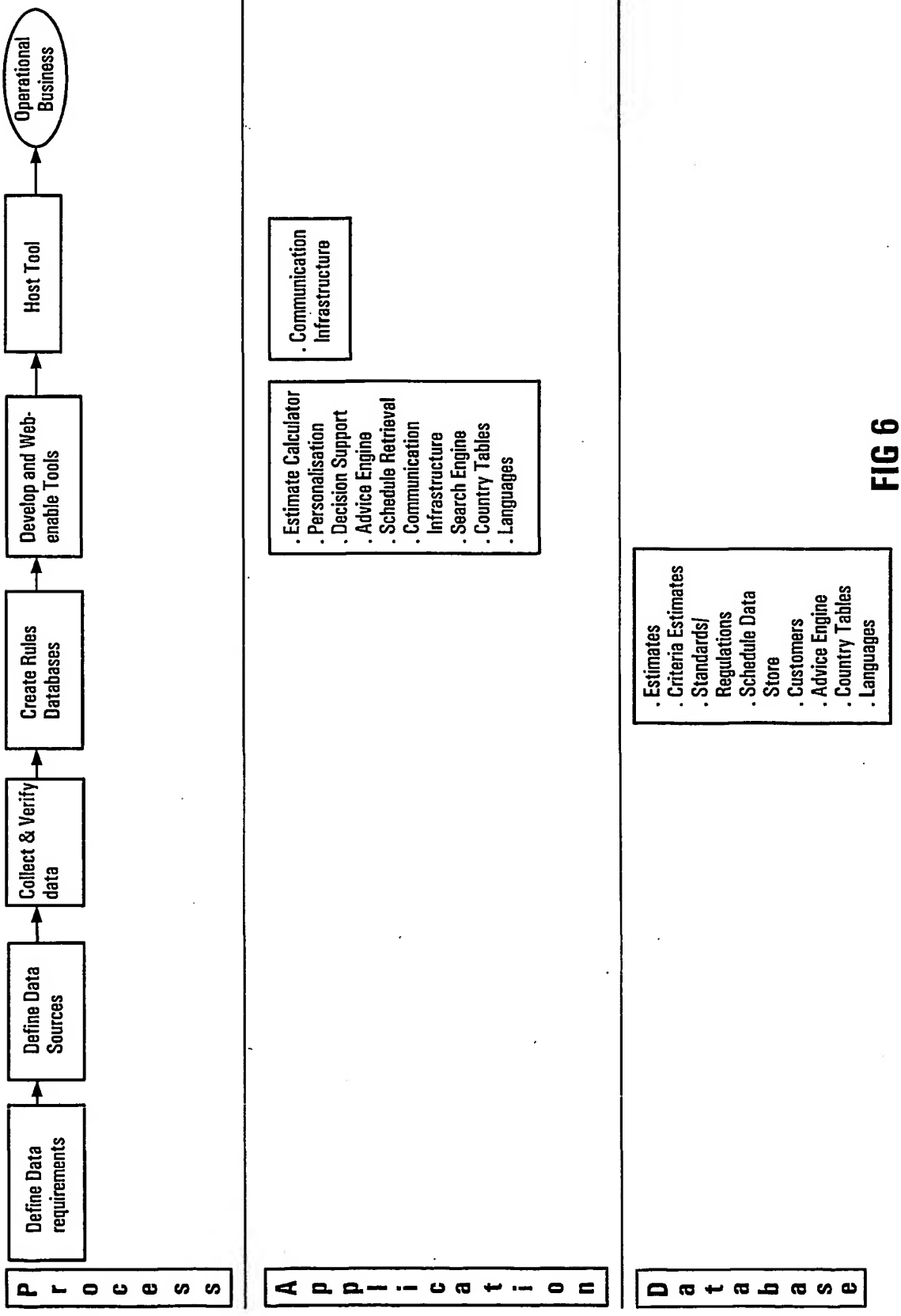

Process
Define Data requirements
Define Data Sources
Collect & Verify data
Create Rules Databases
Develop and Web-enable Tools
Host Tool
Operational Business
Application
. Communication Infrastructure
. Estimate Calculator
. Personalisation
. Decision Support
. Advice Engine
. Schedule Retrieval
. Communication Infrastructure
. Search Engine
. Country Tables
. Languages
Database
. Estimates
. Criteria Estimates
. Standards/ Regulations
. Schedule Data Store
. Customers
. Advice Engine
. Country Tables
. Languages

FIG 6

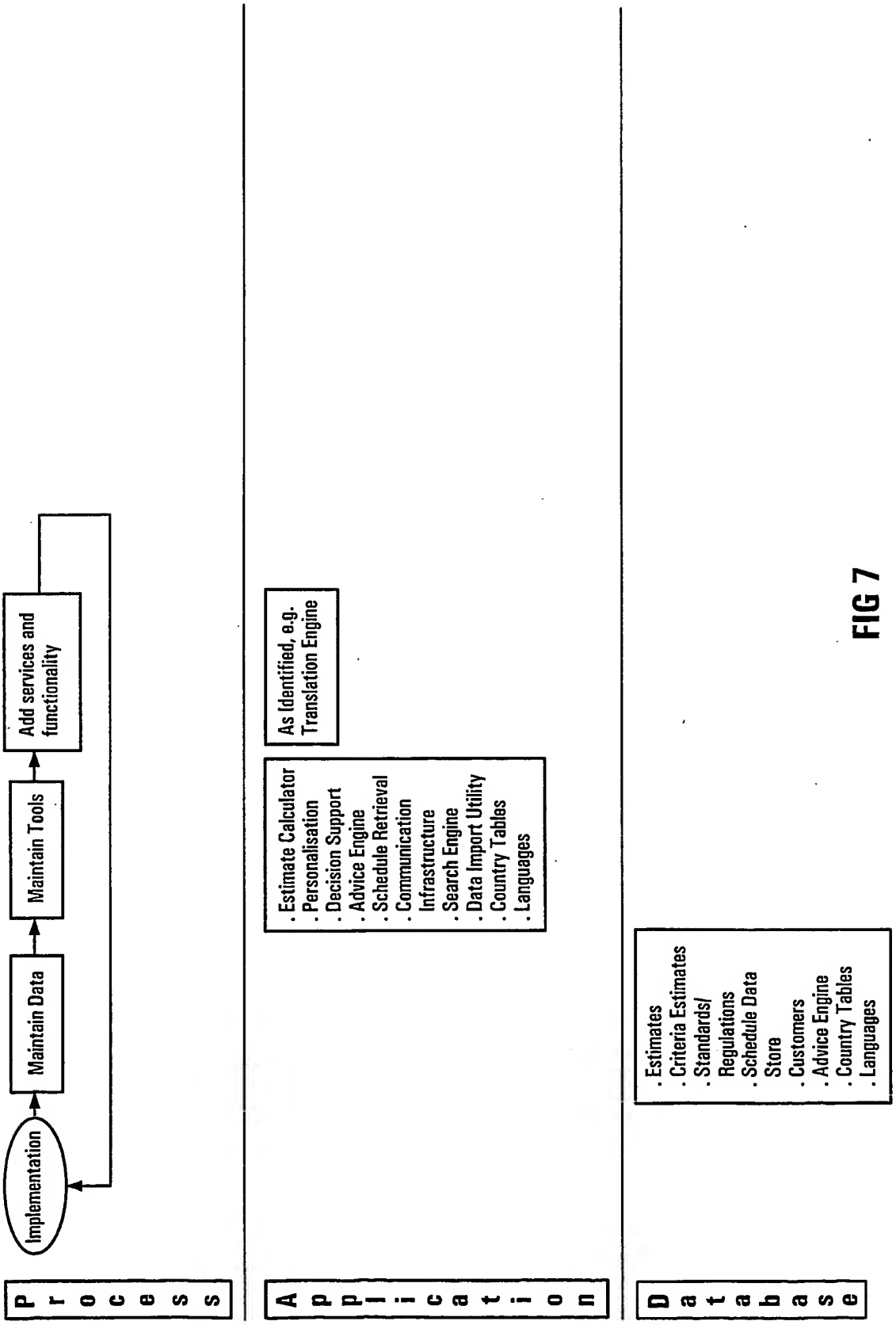

Process
Implementation
Maintain Data
Maintain Tools
Add services and functionality
Application
. Estimate Calculator
. Personalisation
. Decision Support
. Advice Engine
. Schedule Retrieval
. Communication Infrastructure
. Search Engine
. Data Import Utility
. Country Tables
. Languages
As Identified, e.g. Translation Engine
Database
. Estimates
. Criteria Estimates
. Standards/ Regulations
. Schedule Data Store
. Customers
. Advice Engine
. Country Tables
. Languages

FIG 7

Incoterms 1990

COST/RISK DISTRIBUTION DISPLAY

The following display indicates how the seller's and buyer's cost/risk responsibilities vary from one Incoterm to another.

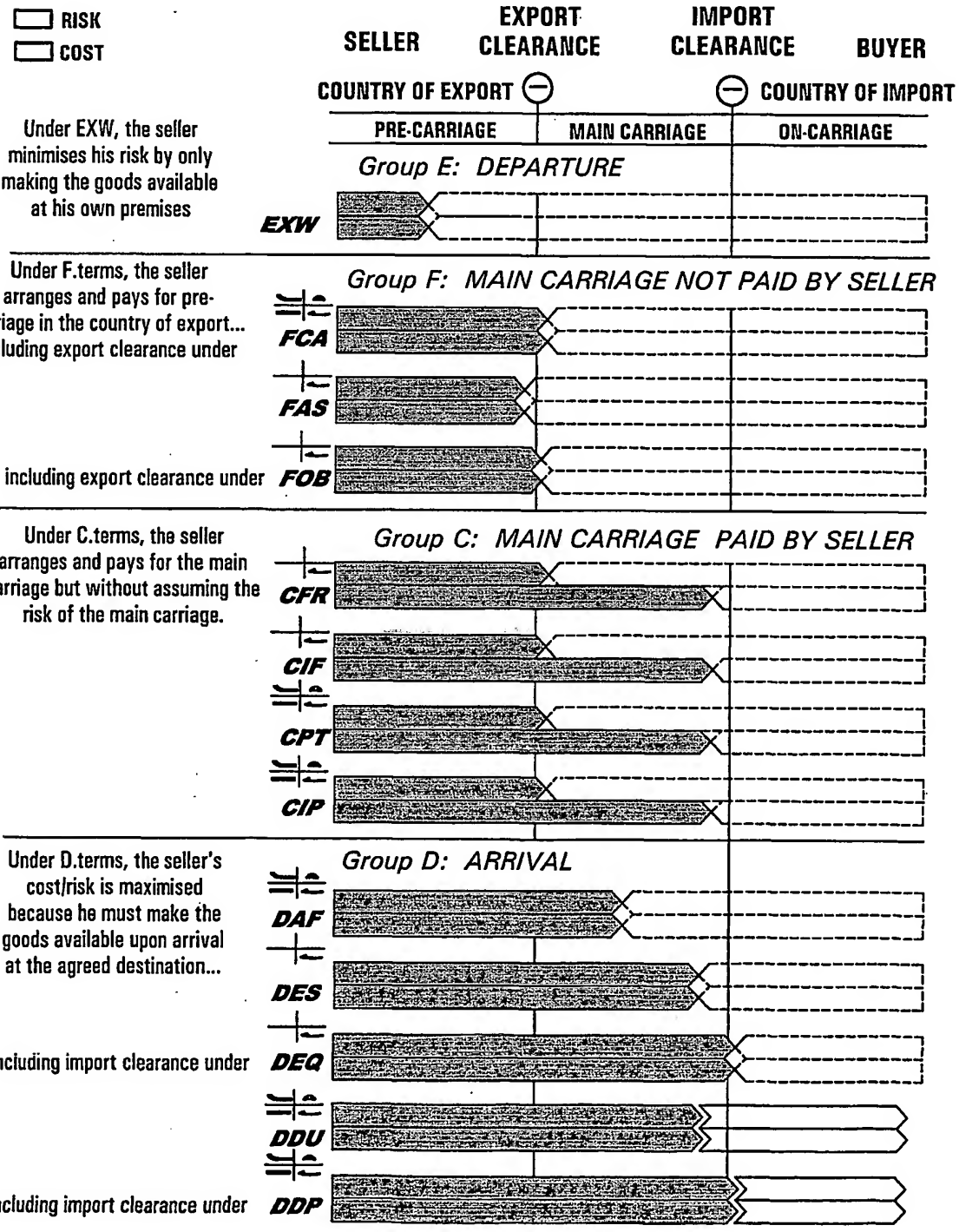
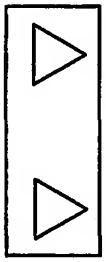


FIG 8

Interlogcost

ESTIMATED COSTS FOR MOVEMENT OF GOODS THROUGHOUT THE WORLD



DO YOU REQUIRE FURTHER EXPLANATION OF SERVICE

DO YOU REQUIRE ESTIMATE

(Click on requirement)

FIG 9

(If clicked on 'explanation')

This XYZ service will provide you with an immediate estimation of costs for the movement of goods across international borders from any global source to any global destination.

The service will ask you to complete relevant questions, which will provide a final delivered cost estimate to support the process of business decisions to proceed (or not) with the project.

A customer's first estimate is provided at no cost.

If the initial estimate is of interest, the customer can ask for a refinement wich will require more detailed information and will provide sea / air comparisons, suggested routes, and other useful guides.

The information can be made available to a customer's Freight Forwarder who will process final cost negotiations and physical transport arrangements with carriers.

FIG 10

(If clicked on "estimate required")

Enter Following:

Commodity:

Purchase Terms:

e.g. Ex Works

FOB
CFR etc

Mode of Transport SEA AIR

Currency of estimate:

Cost of Goods:

Cost of Goods currency:

Weight:

Measurement:

Country of Origin:
e.g. Germany

Submit

FIG 11

(Once country of origin is entered the following screen will come up)

Country of Origin

Click on source location

FIG 12

(Once source location is selected the following screen will come up)

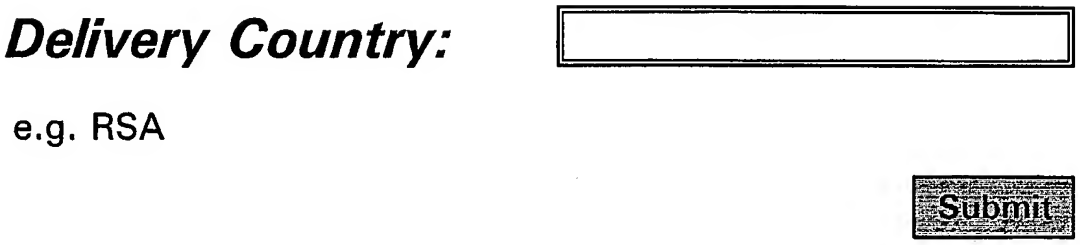


FIG 13

(Once delivery country is entered the following screen will come up)

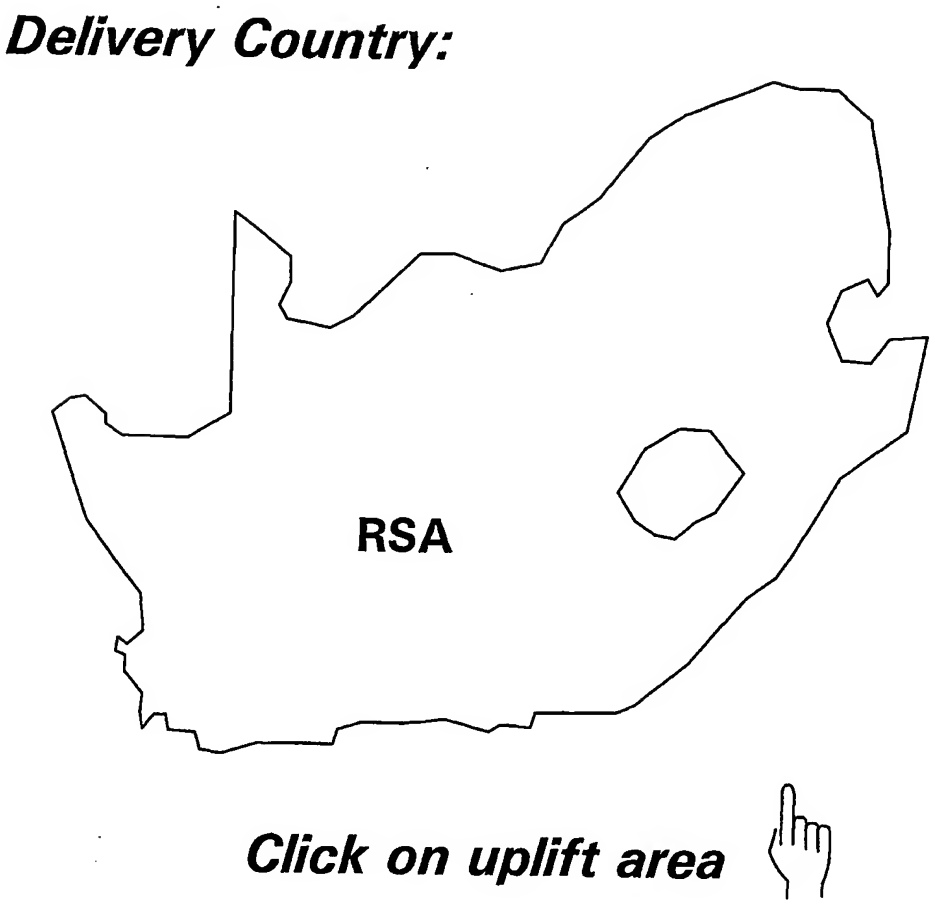
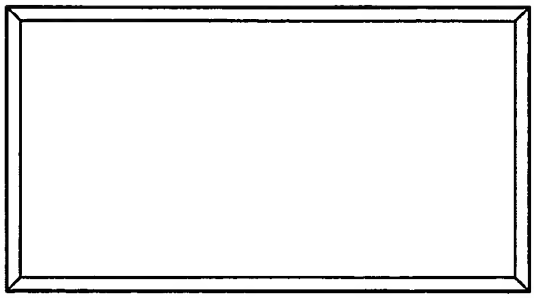


FIG 14

(Once delivery area is selected the following screen will come up)

Estimated Cost:



Further refinement required ? YES

NO

FIG 15

PATENT COOPERATION TREATY

PCT

DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rules 13ter.1(c) and Rule 39)

Applicant's or agent's file reference	IMPORTANT DECLARATION	Date of mailing *(day/month/year)*
F16035 LVDW		30/08/2001
International application No.	International filing date *(day/month/year)*	(Earliest) Priority date *(day/month/year)*
PCT/IB 01/01190	04/07/2001	05/07/2000
International Patent Classification (IPC) or both national classification and IPC	G06F17/60	
Applicant		
ERLANK, Peter, Eric		

This International Searching Authority hereby declares, according to Article 17(2)(a), that **no international search report will be established** on the international application for the reasons indicated below

1. [X] The subject matter of the international application relates to:
   - a. [ ] scientific theories.
   - b. [ ] mathematical theories
   - c. [ ] plant varieties.
   - d. [ ] animal varieties.
   - e. [ ] essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes.
   - f. [X] schemes, rules or methods of doing business.
   - g. [ ] schemes, rules or methods of performing purely mental acts.
   - h. [ ] schemes, rules or methods of playing games.
   - i. [ ] methods for treatment of the human body by surgery or therapy.
   - j. [ ] methods for treatment of the animal body by surgery or therapy.
   - k. [ ] diagnostic methods practised on the human or animal body.
   - l. [ ] mere presentations of information.
   - m. [ ] computer programs for which this International Searching Authority is not equipped to search prior art.

2. [ ] The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out:
   [ ] the description [ ] the claims [ ] the drawings

3. [ ] The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions prevents a meaningful search from being carried out:
   - [ ] the written form has not been furnished or does not comply with the standard.
   - [ ] the computer readable form has not been furnished or does not comply with the standard.

4. Further comments:

Name and mailing address of the International Searching Authority	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	María Rodríguez Nóvoa

International Application No. PCT/IB 01/01190

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 203

The subject-matter claimed in claims 23-50 falls under the provisions of Article 17(2)(a)(i) and Rule 39.1(iii), PCT, such subject-matter relating to a method of doing business.

Claims 1-22 relate to commonplace technological features for performing the business method of the method claims. Although these claims do not literally belong to the method category, they essentially claim protection for the same commercial effect as the method claims. With reference to the Guidelines, B-VIII, points 1-6, the International Searching Authority considers that searching such commercial features would serve no useful purpose. This applies to the remaining commonplace technological features of these claims as well.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.